

DH:DH:1148-3#883

Mr J Murphy
Environmental Assessment Officer
Energy and Resource Assessments
Department of Planning, Industry and Environment
GPO Box 39 Sydney NSW 2001

Dear Mr Murphy

RUSSELL VALE EXPANSION PROJECT REVISED PREFERRED PROJECT REPORT

Thank you for the opportunity to comment on the updated Preferred Project Report (PPR) for the proposed expansion of the Russell Vale Colliery Project.

The Project expansion includes part of the eastern section of the Wollondilly Local Government Area (LGA) and is noted to be located within a Drinking Catchment Special Area. The significant lower level of subsidence impacts associated with the First Workings only approach proposed by the updated PPR in comparison to the previously proposed longwall approach is welcomed in principle. However, a number of potential shortcomings have been identified within the updated PPR that has warranted the preparation of a submission (attached).

A key viewpoint expressed in the submission is the insufficient assessment of potential impacts by the updated PPR to surface and groundwater sources, (a key concern of Council and the local community). This viewpoint is largely based on a review of documentation that has recently prepared as part of the review of Hume Project, which also proposes a First Workings Approach. The submission requests an adequacy review of the updated PPR based on the findings and recommendations of this documentation that includes a report produced by the Independent Planning Assessment Commission (IPAC). The submission further expresses the preferred position of Council staff that the updated PPR for the Russell Vale Expansion Project should be the subject of an investigation by an IPAC and that a Public Hearing be held as part of this investigation process.

Please contact Council's Environmental Assessment Planner, David Henry, for any enquiries regarding issues raised in the submission on (02) 4677 9687 or via e-mail david.henry@wollondilly.nsw.gov.au.

Yours faithfully



Mandy Marino
Acting Manager Environmental Outcomes

Submission on the Preferred Project Report for the Russell Vale Expansion Project

This submission provides comments on the Preferred Response Report (PPR) for the Russell Vale Colliery expansion (Expansion Project), based on the updated position of Council regarding mining and known research and publications by research organisations. It is understood that the updated Preferred Response Report will be considered by the Department of Planning, Industry and Environment (DPIE), as part of the preparation of its Assessment Report for the Project Application.

Background Information

The proponent is noted to have adopted a First Workings approach for mining operations. This approach is recognised as having significantly lower subsidence related impacts to watersources in comparison to longwall methodologies proposed by the previous Preferred Response Report. However, the following provides a brief overview of the current position of Council regarding these impacts given the location of the Expansion Project in the Drinking Catchment and potential impacts to water sources noted to have been identified by the PPR.

(i) *Overview of previous comments provided on the Russell Vale Colliery Project*

Council provided a submission to the Planning and Assessment Commission established to investigate the Expansion Project and previous version of the PPR in January 2015. This submission also provided comment on the Major Project Assessment Report and draft Determination prepared by the DPIE. A major issue raised in this submission was the adequacy of the scientific basis of the assessment and management of potential impacts to watersources by each of these documents.

(ii) *Updated Council position regarding mining and the Russell Vale Project*

Council has taken a proactive position in advocating the concerns of Council regarding potential impacts of mining on the condition of water sources as well as the provision of drinking water supplies. Applicable resolutions of Council defining its position regarding these impacts within the context of the Special Areas Catchment and other projects within the Wollondilly LGA is presented in Attachment 1. Council has also lodged a wide variety of submissions of relevance to the Expansion Project with the most recent being the Tahmoor South Project Application. The Executive Summary of this submission is presented in Attachment 2 for information purposes.

The First Workings approach of the PPR is acknowledge as responding, (at least partially), to a range Council concerns and resolutions. However, staff are aware of research based documents which indicate potential impacts (at a lower level and different nature to impacts from longwall mining) to watersources associated with this approach. **The DPIE is therefore requested to note the view of staff that the attached resolutions, as well as issue raised previous applicable Council submissions, are viewed as being transferrable to the Russell Vale Colliery Project.**

(iii) *Position regarding Mining in the Catchment*

The land covered by the PPR within the Wollondilly LGA is noted to be situated within Drinking Catchment Areas. Council supported in principle the establishment of the Independent Panel for Mining in the Catchment (Expert Panel), as a means of achieving current scientific advice on the potential impacts of mining operations on water supplies within the drinking catchment. The first Terms of Reference for the Panel, ***(Undertake an Initial Review and Report on Specific Coal Mining Activities at the Metropolitan and Dendrobium Coal Mines in the Greater Sydney Water Catchment Special Areas)*** is viewed as having direct relevance to

the PPR. The DPIE is requested to note that in endorsing the submission on the Terms of Reference for the Expert Panel at its meeting on 18 June 2019, Council resolved (in part) to “request that no Determinations be issued for any mining related applications until such time that it has received and reviewed the Final Report produced by the Panel”. The original and supplementary submissions lodged with the Expert Panel is provided in Attachment 3 for information purposes.

It is understood that the submission of the Final Report by the Expert Panel the DPIE on its second Term of Reference to “Undertake a review of current coal mining in the Greater Sydney Water Catchment Special Areas with a particular focus on risks to the quantity of water available, the environmental consequences for swamps and the issue of cumulative impacts” has been delayed until 14th October 2019. It is contended that this Terms of Reference Item has direct relevance to the PPR particularly given the absence of ‘subsidence’ in its wording. It is consequently considered appropriate that the DPIE defer any consideration of the updated PPR until the Final Report by the Expert Panel has been received and reviewed.

In relation to this matter, a report prepared by Staff on the Dendrobium Colliery Environmental Impact Statement is scheduled to be considered by Council at its meeting on 16th September 2019. Details of any formal Council position regarding mining in Drinking Catchment Areas will be forwarded to the DPIE shortly after this meeting. However, the view of Council staff expressed in this report over necessary criteria for the undertaking of such mining for information of the DPIE is:

- *There needs to be scientific based demonstration of no adverse impacts to the volume and quality of water supplies within the Catchment Special Areas.*
- *There needs to be satisfaction expressed by Water NSW over the addressing of issues it has raised regarding the regulation and monitoring of the impacts of mining in the Catchment Special Areas.*

General comments on the Russell Vale Expansion Project

(i) Economic benefits

Council recognises the importance of coal mining in the southern coalfields to the economy and for employment on a local and broader scale. The proposed expansion of the Russell Vale Colliery Project is considered unlikely to result in direct economic benefits to Wollondilly or social implications given the isolation of the Project Area and its proximity to Wollongong. However, the Application is likely to result in indirect benefits that can be identified from modelling within the document “Community Demographic Resources for Wollondilly Shire Council” which calculates economic benefits for the Wollondilly LGA based on the direct employment of a particular Project.

(i) Potential implications to local water supplies

The Wollondilly LGA receives its water supply directly from Avon and Cataract Dams located within a section of the Drinking Catchment Area covered by the Dendrobium Project Area rather than Warragamba Dam. The potential adverse implications to this water supply from water loss as a consequence of mine induced fracturing is consequently viewed as being a potential impact of the Project. The PPR however would not appear to have investigated potential long-term associated social and economic implications of any such reduction in supply to consumers.

This issue has implications for the adequate servicing of current and future Development applications received by Council as well as servicing Growth Areas that includes Wilton and Appin within the Wollondilly LGA that are projected to involve approximately 50,000 residents.

The DPIE is requested to note in relation to this matter that Council resolved, (in part), at its meeting on 18th August that *"Council write to the NSW Minister for Planning highlighting the challenges of water conservation in our area and request this be considered in relation to growth in our region"*.

Comments on the Revised Preferred Project Report

This section of the submission provides comments on the key area of concern over potential adverse implications of the Expansion Project to surface and groundwaters and their connectivity and requested DPIE response.

(i) Proposed mining approach by the Preferred Response Report

The assessment, monitoring and regulation of potential impacts associated with longwall mining operations have been the focus of a wide range of Council submissions on both mining applications and Government policy initiatives. The adoption of a First Workings Scheme by the PPR with predicted significantly less subsidence related impacts is consequently welcomed in principle.

It is understood in relation to this matter that the Hume Project within the Wingecarribee LGA involves a similar first workings approach adopted by the PPR. It is noted however that shortcomings in aspects of the Environmental Impact Assessment for this Project has been identified by both the Project Advice provided by the Independent Expert Scientific Committee (IESC) and an Independent Planning Assessment Commission (IPAC) established to investigate the Project. The following extract from the IPAC Report is considered to highlight these shortcomings:

"The provision of additional information as recommended in this Report and further expert consideration, is required to determine whether or not the Project has merit as an innovative approach to the mining of metallurgical coal with acceptable environmental impact"

The provision of comment over the relevance and implications of the Hume Project to the Russell Vale Colliery Project is acknowledged as not being a matter for Council. However, as a minimum, Council staff would expect that the PPR consider the Hume Coal Project and that the specialist advice on this Project be considered during the development of any Determination by the DPIE. The apparent absence of reference to the Hume Coal Project and specialist advice within the PPR is therefore noted with strong concern. **The DPIE is requested to obtain scientific advice over the relevance of the Hume Coal Project to the proposed First Workings only approach of the Russell Vale Colliery Project Application.**

(ii) Potential impacts of the Expansion Project to surface and groundwater sources

The provision of detailed comments regarding the adequacy of these components is acknowledged as being a matter for relevant Government Agencies and research institutions such as the Independent Expert Scientific Committee. However, the following provides comments on the considered adequacy of the PPR in terms of its scientific basis and consistency with the position of Council based on resolutions and issues raised in applicable submissions.

(a) Subsidence induced potential impacts to water sources

Previous sections of this submission have recognised the predicted significant benefits of the First Workings approach in reducing impacts attributable to mine submissions. They have however also referred to a range of potential impacts to water sources for the first workings approach associated with the Hume Project identified by the IPAC and IESC Project Advice.

A review by Council staff with a working knowledge in this matter has identified that the PPR contains a detailed description of subsidence effects associated with the project as well as detailed groundwater modelling. The review however also identified the following shortcomings/issues that are consistent with the concerns of Council and local community:

- There is a range of generic descriptions in Specialist reports including “ *As the revised Project will not result in any change to the contributing receiving water catchment area, and will result in an improvement to the discharge water quality from the Surface Facilities, no negative cumulative impacts are considered likely as a result of the revised Project*”.
- There is insufficient detail of potential impacts to water sources which are listed in the Surface Water specialist report.
- There is insufficient assessment of potential impacts that may occur in the sections of the Project Area where there is identified potential for the collapse of installed pillars. The PPR is noted to state in relation to this matter that this could result in subsidence of 1 to 2 metres (with resulting fracturing extending towards the surface).

The statement in the Executive Summary of the PPR that the *Project is not expected to result in perceptible surface subsidence or significant interaction with existing groundwater systems*” is questioned based on the above identified concerns. It is therefore considered warranted that the Precautionary Principle be applied to assume that the First Workings approach has the potential to impact surface and groundwater sources over both a short and long timeframe.

It is further considered warranted that these potential impacts be subject to a detailed environmental assessment in the form of a revised PPR that is publicly exhibited. Staff would expect that this environmental assessment be consistent with the following position of Council expressed in a range of previous submissions (including recently to the Dendrobium Colliery Project) prior to any consideration of Determination:

- Applications should contain a description of the properties and behaviour of the groundwater environment that is informed by extensive groundwater monitoring and consistent with scientific research.
- All potentially affected watercourses should be subject to detailed assessment of likely subsidence induced impacts to surface and groundwaters (including their connectivity), within a catchment context.
- Trigger Response Plans and any equivalent Plans should be based on strong scientific knowledge and extensive baseline data.
- There should be full rehabilitation of any watercourses impacted by mining operations to their former ecological condition.

In relation to this matter, staff have prepared a report regarding the Environmental Impact Statement for the expansion of the Dendrobium Colliery Project that will be considered at a meeting of 18th September. The draft report refers to submissions made by Water NSW to the Expert Panel, and notes their strong synergy with the concerns of Council regarding water supply provision as well as position listed above.

The DPE is consequently requested based on the above considerations to carry out the following activities:

- Note the preferred view of Council staff that the PPR be subject to an investigation by an IPAC and that a Public Hearing be held as part of this process.
- Assess the adequacy of the PPR with issues raised over the assessment and monitoring of potential impacts to watersources associated with the First

Workings approach identified by the IPAC Report and IESC advice regarding the Hume Project.

- Consider the position and concerns of Council as detailed in the submission to the Expert Panel, (Attachment 3), as well as resolutions to be provided regarding the Dendrobium Environmental Impact Statement during its review of the PPR.
- Consider and ensure consistency of the PPR with correspondence from Water NSW to the Expert Panel as well as any advice on the Expansion Project.
- Defer its finalisation of the review of the PPR until the receipt and review of the Final Report by the Expert Panel.

(b) Impacts directly associated with the First Workings approach

Council is acknowledged as not having provided submissions or hold a specific position in relation to the First Workings only procedures apart from welcoming the predicted significant reductions in subsidence induced impacts. Identified shortcomings in the assessment of these impacts by the Hume Coal EIS in the IPAC Report and IESC Project Advice have however been noted with concern:

- *"Sensitive analysis of the influence of the full range of model parameters and boundary conditions on groundwater drawdown predictions is needed for assessment of the potential scale of impacts and the suitability of monitoring and management options" (IESC Project Advice).*
- *"The Committee finds that the Applicant and the Department have not adequately assessed or considered the potential impacts of the Project on groundwater because of the uncertainty around the modelling undertaken to date and the associated uncertainty this might create in understanding the potential groundwater impacts, and the lack of certainty around the practical application of the Applicant's make good proposal" (IPAC Report).*

It is consequently considered warranted and requested that the DPIE require the review of the PPR to identify the adequacy of the PPR based on the findings and recommendations of the Hume Coal IPAC Report as well as specialist advice provided on this Project. The DPIE is further requested to note the preferred position of Council Staff that the PPR should be the subject of an investigation by an IPAC and that a Public Hearing be held as part of this process.

(iv) *Potential impacts to terrestrial biodiversity*

The PPR is noted to state that there will be no vegetation clearance as a result of the Expansion Project due to no additional surface infrastructure being required. The provision of comments on potential impacts of the Expansion Project on biodiversity values is also viewed as being a matter for the Environment, Energy and Science Division within the DPIE. This submission consequently does not provide any specific comments regarding this component of the PPR.

The conclusion of the PPR that the *Expansion Project is considered to have negligible risk of impacting any potential Koala habitat* is agreed with in principle. However, comments on the PPR regarding the presence of koala habitat within the Expansion Project area by the PPR are also agreed with. The protection of local koala populations and habitat is of major concern to Council and the local community. It is considered appropriate that this habitat be protected and the PPR identify any potential habitat linkage that exists between the Project Area and known populations to the west near Wilton.

The DPIE is requested to provide a commitment/condition in any Determination that requires the preparation of a Biodiversity Management Plan in the event of the proponent identifying that vegetation clearance is necessary. The DPIE is further requested to ensure that this Plan be required to consider any impacts of such clearance on koala habitat in a broad context.

CONCLUSION STATEMENT

The Russell Vale Colliery Expansion Project includes parts of the eastern section of the Wollondilly Local Government Area. The adoption of the First Workings only approach by the updated Preferred Response Report is welcomed in principle as a means of responding to key concerns of Council and the community over potential subsidence induced impacts to watersources.

However, this submission has referred to a number of shortcomings in regard to the Environmental Impact Statement for the Hume Project noted to be utilising a similar mining process. It requests that the Department of Planning, Industry and Environment undertake an adequacy review of the PRR based on the findings and recommendations of these documentations including the report produced by the Independent Planning Assessment Commission (IPAC). It also expresses the preferred position of Council Staff that the PPR should be the subject of an investigation by an IPAC and that a Public Hearing be held as part of this process.

ATTACHMENT 1

RESOLUTIONS OF COUNCIL RELATED TO MINING

Resolutions of Council at its meeting of 16th July 2007

1. *That Council make a formal submission and oral presentation to the Inquiry into Coal Mining in the Southern Coalfields.*
2. *That Council's submission stresses Council's opposition to any mining that affects our river systems.*
3. *That Council's submission emphasises the Mine Subsidence Board's responsibility to restore structures damaged as a result of mining activity.*
4. *That the Inquiry increase the pressure on the mining companies and the mining equipment suppliers to develop a method of disposing of the excess material back into the cavity as the mining is taking place.*
5. *That Council calls for the completion of the Maldon Dombarton rail link to transport coal.*
6. *That Council write to the Minister and express our disappointment that the panel hearing is being held in Camden.*
7. *That Council offer its facilities at Wollondilly.*

Resolutions of Council at its meeting of 16 March 2009

1. That Council write to the Minister and Shadow Minister for Mining requesting that Councils be compensated through mining royalties and the Mine Subsidence Board for the additional cost of infrastructure projects.
2. That Council support the Association of Mining Related Councils in their endeavour to get a percentage of the mining royalties for such instances.

Resolution of Council at its meeting of 14 August 2009

1. That Wollondilly Shire Council write to the Minister for Primary Industries and Shadow Minister for Climate Change and Environmental Sustainability expressing its concerns over the recent cracking of Myrtle Creek.

Resolution of Council at its meeting of 19 October 2009

1. That Wollondilly Shire Council write to the Minister for Planning and Shadow Minister for Planning calling for third-party appeals to be allowed for Part 3A processes or that Part 3A be removed from NSW Government Policy.

Resolution of Council at its meeting of 15 November 2010

1. That Council send correspondence to the Minister for Planning requesting that a new Part 3A application be lodged for the Bulli Seam Project, given the significant changes to the original application by the proponent and the flaws in the original exhibition process.

Resolution of Council at its meeting of March 2013

1. That Wollondilly Council write to the Minister of Regional Infrastructure and Services requesting a review of the methodology used to classify the 'tiers' of Mining Affected Communities and expressing its concern at the relegation of Wollondilly's Community to Tier 3, excluding it from any support from the Resources for Regions Programs.

Resolution of Council at its meeting of 11 December 2014

1. That Council write to the Minister for Primary Industries and the Minister for Planning requesting that the impacts on communities and infrastructure from coal mine gas drainage be included in the criteria for Local Government assistance through the Resources to Regions Program.

Resolution of Council at its meeting of 16 March 2015

1. Council convene a meeting with invited community members of Douglas Park and representatives of Illawarra Coal to facilitate a consultation between the parties regarding Illawarra Coal's proposed gas extraction and power plant development in the Douglas Park area.

Resolution of Council at its meeting of 20 July 2015

1. That Council write to the Federal Minister for Environment, the Federal Minister for Agriculture, the NSW Minister for Planning, the NSW Minister for Primary Industries and the NSW Minister for Industry Resources and Energy in regard to the approval of the Shenhua Watermark mine on the Liverpool Plains to:
 - Express dismay regarding the approval of the mine on the Liverpool Plains by the Federal Government given the region's major role in Australia's food production balanced with a vulnerable environment and the unacceptable risk to this balance that the mine may cause.
 - Express its concerns that in a local context, the productive peri-urban areas of Sydney are also being threatened by unsympathetic land uses.

Resolutions of Council at its meeting of 20 July 2015

1. That Council endorse the submission on exhibited components of the draft Integrated Mining Policy.
2. That Council send correspondence to the NSW Minister for Planning tat:
 - (a) Acknowledges the benefits in introducing the Integrated Mining Policy.
 - (b) Expresses disappointment that the exhibited Policy has not addressed issues raised in previous Council submissions.
 - (c) Advises that Council is not able to finalise its position until all documents associated with the Policy have been publicly exhibited and submissions received.
 - (d) Stresses the importance of the inclusion of all stakeholders in the notification process.

Resolutions of Council at its meeting of 21 September 2015

1. That Council continue to monitor the Douglas Park Mine Gas Drainage and Power Plant Proposal by South 32 and that Council continue to engage with residents of Douglas Park regarding their concerns about the proposal.

2. That Council throughout the process, advocate on behalf of the community, communicating their concerns to the consent authority, our state member, mining authority, and any other applicable minister/authority.

Resolutions of Council at its meeting of 15 February 2016

- That Council take a proactive role in advocating for the protection of the natural environment from impacts of mining under Redbank Creek.
- That Council write to the State Minister for Planning, the Minister for Environment and the Minister for Resources and Energy expressing its concern that compensation mechanisms for damage to the natural environment from mining impacts is not considered in the function of the Mine Subsidence Board and Council calls for this situation to be reviewed and remedied.
- That Council consider the allocation of resources in the third Quarterly Review to undertake advocacy regarding this issue.

Resolutions of Council at its meeting of 15 February 2016

- That Council take a proactive role in advocating for the protection of the natural environment from impacts of mining under Redbank Creek.
- That Council write to the State Minister for Planning, the Minister for Environment and the Minister for Resources and Energy expressing its concern that compensation mechanisms for damage to the natural environment from mining impacts is not considered in the function of the Mine Subsidence Board and Council calls for this situation to be reviewed and remedied.
- That Council consider the allocation of resources in the third Quarterly Review to undertake advocacy regarding this issue.

Resolutions of Council at its meeting of 21 March 2016

- That Council write to the NSW Minister for Environment and NSW Minister for Resources and Energy requesting:
 - The establishment of on-going funding for investigations and monitoring of the condition of watercourses that are identified as being impacted by subsidence associated with underlying operations.
 - Ongoing funding be made available to local governments, research organisations and community groups upon the lodgement of suitably detailed applications.

Resolutions of Council at its meeting of 16 May 2016

- That Council requests a copy of the report investigating possible non-compliance regarding the conditions of consent for the Bulli Seam Operation Project and the Extraction Plan for long-walls 901-904 from the Department of Planning and Environment Compliance Team and EPA.

- That Council also request information from South 32 as to what their approved setback from the Nepean River is.
- That copies of these requests be forwarded to the Local Member for Wollondilly, Jai Rowell and that a report come back to Council on the responses received.

Resolutions of Council at its meeting of 20 June 2016:

- Write to the relevant Federal and State Ministers, the Federal and State local members, the Greater Blue Mountains World Heritage Area Advisory Committee and UNESCO demanding that action be taken to further investigate the causes of continued water loss from the World Heritage listed Thirlmere Lakes. That this action includes the funding and support of rigorous and detailed research into:
 - The water loss patterns and trends in the past and over current times.
 - Predictive modelling of the consequences to the Lakes's biology and hydrology of continued or prolonged water loss.
 - Targeted investigation into the suggested cause of the water loss in relation to the Tahmoor Mine's operations in the past and future.
 - The potential of engineered options to reinstate and maintain water levels to protect the biodiversity and hydrology of the Lakes.
- That Council, through the oversight of the Minerals and Energy Resource Committee, undertake a facilitated solutions focused forum to investigate and identify solutions to the continued observed water loss from the World Heritage listed Thirlmere Lakes and that Glencore and other key stakeholders associated with the three tiers of government be invited to participate in this forum.

Resolution of Council at its meeting of 18 June 2018

- That Council write to the NSW Department of Planning and Environment to:
 - I. Welcome the establishment of the Independent Expert Panel for Mining in the Catchment and its composition.
 - II. Requests that no Determinations be used for any mining related application within the Catchment Area until such time that it has received and reviewed the Final Report produced by the Panel.

Resolutions of Council at its meeting of 18th July 2016

- The Executive include the following recommendations in the Business Paper of the next available meeting of the Association with a view to advocate the position of Council and the local community defined by the supplied resolutions:
 - i. The Association provide support to the resolutions of Wollondilly Shire Council regarding concerns over the continued observed water loss from the World Heritage listed Thirlmere Lakes and the conclusions of recent scientific studies regarding this matter.
 - ii. Pursuant to i), Correspondence be sent to the NSW Minister for Resources and Energy (the Hon Anthony Roberts) and the NSW Minister for Primary Industries (the Hon Niall Blair) advising of the support to the resolutions and requesting a prompt response.

Resolutions of Council at its meeting of 17th September 2018

- That Council write to the Minister to request further investigation into the impacts of fracturing and modified flow of Redbank Creek. As identified in Dr Ian Wright's Research Study for Western Sydney University, it is reported that Redbank Creek has the worst pollution from Mine Subsidence in the world. This study identified the rehabilitation of the creek channel and recovery of the creek water quality / ecology is very challenging.
- That Council request that the Minister investigate how the mining company could contribute to the rehabilitation of Redbank Creek.
- That Council workshop how we can advocate to assist Dr Wrights research findings and that we add it to the State Issues Paper.

Resolution of Council at its meeting of 15 October 2018

- That letters be sent to relevant Commonwealth MP's asking the Australian Government to use their Constitutional power and duty to protect water sources within the Drinking Catchment Areas of Avon, Nepean, Cordeaux and Cataract Dams from South 32's Dendrobium coal mining activities.

Resolution of Council at its meeting of 19 November 2018

- That Council send correspondence to the NSW Department of Planning and Environment seeking the reasons for all of the recommendations provided by the Independent Expert Committee for Mining in the Drinking Catchment not being incorporated into the Approval for Longwall 16 dated 30th May 2018.

ATTACHMENT 2

EXECUTIVE SUMMARY OF TAHMOOR SOUTH PROJECT SUBMISSION

The Tahmoor South Project Application (Project Application) is entirely located within the Wollondilly Local Government Area (LGA) although the predicted maximum subsidence area extends into a small section of the adjoining Wingecarribee Local Government Area. It is recognised as having a number of economic benefits on a local and broader scale as well as being an important source of coking coal for the manufacture of steel.

The project application is viewed as being a significant development within the Wollondilly LGA and has relevance to a range of Council responsibilities in terms of asset management, protection of the environment, waste management (including the operation of the Bargo Waste Management Centre) and advocacy. It has been reviewed by Council Staff with technical knowledge and expertise in relation to these responsibilities.

It is requested that the submission be recorded as a draft that expresses the views of Council Staff. The notification of any formal endorsement of the submission and related resolutions of Council will be forwarded to the DEP shortly after Council's meeting on Monday 18th March 2019. The draft submission has a broad structure comprised of Background Information (Part A) which outlines the relevance of the Project to Wollondilly LGA and key areas of concern to Council and the local community. Part B provides comments on issues common to a number of aspects of the Environment of strong relevance to the concerns of Council and the local community. Part C provides comments on specific sections of the Environmental Impact Statement (EIS) consistent with the previously expressed position of Council.

The draft submission features an independent peer review of the Aquatic Ecology and relevant aspects of the Surface Water Impact Assessment Report within the Environmental Impact Statement received from Dr Ian Wright at the University of Western Sydney. It also refers to specialist advice received on the highly technical aspects of mine subsidence induced fracturing and its interaction with surface and groundwater sources by Council Staff. The submission provides comments specifically in regard to the following aspects of the Project Application which are of particular concern to Council and the local community it represents:

- Implications of considered shortcomings in the State Significant Development Framework to the Project Application.
- The adequacy of community engagement during the preparation and public exhibition of the Environmental Impact Statement by both SIMEC Mining and the Department of Planning and Environment.
- The protection of ground and surface waters, (including the ecological health of waterways), from subsidence related impacts associated with the Project Application.
- Investigation of measures to reduce the expansion of the Reject Emplacement Area for the disposal of generated coal rejects by the Project Application.
- Potential impacts of the Project Application to the operation of the Council managed Bargo Waste Management Centre.
- Potential implications of the Project Application to the hydrology of Thirlmere Lakes.

A number of aspects of the Environmental Impact Assessment including a detailed groundwater modelling and comprehensive Social Impact Assessment are viewed as positive.

However, the following shortcomings have been identified which are viewed as warranting amendments to the Project Application prior to being forwarded to the Planning Assessment Commission for investigation and potential Determination.

- Key aspects of the EIS and associated specialist reports have not been updated to reflect scientific research and studies, in particular in regard to the impacts associated with subsidence on water sources.
- The EIS contains an analysis of impacts to Redbank Creek and Myrtle Creek experienced by existing operations associated with the Tahmoor North Project Area as a demonstration over the management of impacts to the condition of waterways by the Tahmoor South Project Application. However, this analysis does not refer to the recently concluded research study by Dr Ian Wright from the Western Sydney University which examined the impacts of mining on the condition of Redbank Creek.
- The groundwater assessment is not considered to include a detailed geological analysis and modelling that would identify the likely interaction of mining induced fracturing with both surface and groundwaters at the Application Stage (based on received specialist advice).
- The absence of a firm commitment to investigate available procedures for the disposal of generated coal rejects as a means of reducing the proposed removal of 34.2 ha of high conservation value vegetation required for its extension.

The draft submission also contains a wide variety of requested responses by the DPE to be implemented based on the structure of the revised State Significant Development that includes:

- The DPE arrange a meeting with representatives of Council, Environment Protection Authority and Subsidence Service NSW as soon as practically possible to discuss concerns over the implication of the Application to the operation of the Bargo Waste Management Centre.
- The DPE request that the current application be reconsidered due to the following identified significant shortcomings based on available information:
 - Key aspects of the EIS and associated Specialist Reports have not been updated to reflect scientific research and studies in particular in regard to the impacts associated with subsidence on water sources.
 - The EIS contains an analysis of impacts to Redbank Creek and Myrtle Creek experienced by existing operations associated with the Tahmoor North Project Area as a demonstration over the management of impacts to the condition of waterways by the Tahmoor South Project Application. However, this analysis does not refer to the recently concluded research study by Dr Ian Wright from the Western Sydney University.
- The DPE provide a response to issues raised in the report received from Council detailing the outcomes of a peer review by Dr Ian Wright from the Western Sydney University on the Aquatic Ecology and relevant parts of the Surface Water Impact Assessment components of the Environmental Assessment.
- The DPE request that the Project application be investigated in detail by the Independent Planning Assessment Commission as part of the Public Hearing Process and that it be updated to incorporate Project Advice provided by the Independent Expert Scientific Committee prior to its referral to this Commission.

Council requests that all issues raised and requested amendments to the SMP Application outlined in this draft submission be considered and addressed by the DPE prior to its forwarding to the Planning Commission. Council also requests that the DPE response to all

submissions as well as any Project Advice on the Application received from the Commonwealth Independent Expert Scientific Committee be made publicly available in a suitable format. Council staff would be available and would appreciate the opportunity to discuss key aspects of issues raised in the draft submission with senior DPE Staff.

ATTACHMENT 3

Submission on the Terms of Reference for the Independent Expert Panel for Mining in the Catchment

The Terms of Reference (ToR's) for the Independent Expert Panel (the Panel), has strong relevance to a number of current and approved mining projects in the Wollondilly Local Government Area (LGA). The establishment of the Panel and intended provision of advice to the NSW Department of Planning and Environment (DPE) on the impacts of mining activities in the Greater Sydney Water Catchment Special Areas (Drinking Catchment) is welcomed by Council.

The responsibilities of Water NSW in the protection and regulation of water supplies within the Drinking Catchment is fully acknowledged by Council. However, the adequate protection of water supplies and overall management of the Drinking Catchment receives a strong level of community feedback. This issue was also raised as part of consultation held during the preparation of Council's Community Strategic Plan. Council consequently considers it has responsibilities in advocating these community concerns to both the Panel and Government.

The comments within this submission are consistent with Council resolutions, issues raised in previous Council submissions as well as expressed views of the local community it represents. The submission is divided into three broad components comprised of an overview of Council's position, support for intended advice based on the issued ToR's and comments on individual ToR items.

Part A: Overview of Council position regarding mining operations

The following provides an overview of the position of Council and sections of the local community in regard to water related impacts associated with mining operations within the Drinking Catchment. A full list of Council resolutions which defines its broad position in regard to mining related matters is presented in Attachment 1 to this submission.

1) Overview of mining operations

The Wollondilly LGA contains four existing underground longwall mining projects within the Drinking Catchment comprised of the Bulli Seam and Dendrobium (both operated by South 32), Russell Vale Colliery (operated by Wollongong Coal and Metropolitan Colliery, (operated by Pee Body), Projects. The boundaries of approved or currently proposed mining operations associated with these projects in relation to the boundary of the Drinking Catchment is presented in Map 1 (Attachment 2). The Russell Vale Colliery proposed expansion, (depicted on this Map as being entirely located within the Drinking Catchment), is however noted to be not referenced in Terms of Reference 1. A response from the Panel over the reasons for this exclusion would be appreciated.

This Map also shows the location of the Tahmoor Colliery Project, (recently sold to SIMEC) is recognised as being outside the boundaries of the Drinking Catchment. This Project is however viewed as having indirect relevance to investigations by the Panel given the identical nature of operations to those Projects in the Drinking Catchment referred to above. This submission consequently refers to studies currently being undertaken by Western Sydney University over impacts associated with approved mining activities to creeklines, which are also considered relevant to the Panel's investigations.

2) Position of Council on water related impacts of mining operations

Concerns over the adequacy of the assessment of potential impacts on water resources (ground and water sources) by mining applications has been a common issue raised in a range of previous Council's submissions on mining applications as well as Government policies. These submissions have advocated the concerns of the community over the need for greater protection of water sources, (ground and surface), as well as enhanced levels of baseline data and scientific assessment.

The adequacy of assessing and protecting the ecological and hydrological of the high number of upland swamps from impacts associated with mining operations has also been a common issue raised. The Panel is requested to note that Council has not supported the NSW Government's *Policy Framework for Biodiversity Offsets for Upland Swamps and Associated Threatened Species Policy Framework* until demonstration from suitably qualified personnel that the hydrological and ecological functions will not be adversely impacted is provided.

3) Council position on the assessment framework for mining applications

Council has also previously raised a number of shortcomings in the assessment as well as approval process for State Significant Development (SSD) under the NSW Planning Assessment framework. These shortcomings are considered by Staff as being heightened by recent reforms to the *Environmental Planning and Assessment Act 1979* and the introduction of the *Biodiversity Conservation Act 2016*, which are both viewed as weakening provisions in regard to SSD.

In relation to this matter, the introduction of the Water Trigger within the *Environment Biodiversity and Conservation Act 1999* has been welcomed as a means achieving increased rigor in the assessment of water related impacts associated with mining projects compared to NSW Government Legislation. Recent Council submissions have suggested on-going research and publications produced by the Commonwealth Independent Expert Scientific Committee (IESC) as a suitable scientific basis for Environmental Assessments associated with mining applications. The recently exhibited *Information Guidelines for Proponents preparing Coal Seam Gas and Large Mining Development Proposals*, prepared by this Committee, (IESC Guidelines), is viewed as being a particularly document in achieving this scientific basis.

Part B: Council position/support regarding the Inquiry

1) Support for the Inquiry

The need for the establishment of the Panel and associated investigation is uncertain given the high level of existing studies and studies currently underway regarding the impacts of mining operations on water sources. However, Council would broadly support any investigations that provides greater scientific certainty in regard to the effects of mining operations on water sources and responds to community concerns regarding this matter.

The members of the Panel are recognised to have a high level of expertise in regard to issues requested to be investigated by the ToR and are also supported. Council Staff are consequently confident that the investigation by the Panel will produce strong scientifically rigorous recommendations and findings in its advice to the DPE.

However, the general absence in confidence in the DPE in adequately responding to investigations, (such as those by established Planning Assessment Commissions), noted to have been expressed by community members are shared in broad terms by Staff. An example in this regard, occurred at Public Hearing held as part of the investigation into the proposed

Russell Vale Colliery expansion by an established Planning Assessment Commission attended by a staff member. Community speakers at this Hearing were noted to express full support to the expertise of the Panel but a low level of confidence in the overall assessment/approval process for SSD. There are consequently strong concerns over the adequacy of findings and recommendations in the Panel's final report being adequately translated into EA's and Determinations to achieve an increased protection of water sources.

The Panel is therefore requested to note that Council has resolved to provide in-principle support to its investigation until such time that the assessment process for mining projects by the DPE has been demonstrably enhanced. The Panel is further requested to note that Council has resolved to notify the DPE of this position.

2) The scope and purpose of the Inquiry

The need for the overall focus of the Inquiry on assessing potential risks to the future supply of drinking water within the Greater Metropolitan Area is recognised. The statement accompanying the ToR's that *"advice, (by the Panel), will include, but is not confined to risks to the total water quantity and holding capacity of surface and groundwater systems, including swamps and reservoirs, and the types and reliabilities of methodologies used to predict, monitor, assess and report on mining effects, impacts and consequences"* is also recognised as being wide-ranging and is supported.

Council Staff however have the following concerns over aspects of the wording of the issued ToR's that are consistent with the previously expressed Council position:.

- The issued ToR's are considered to have a broad focus on responding to effects post approval rather than obtaining a detailed assessment of effects of mining on water sources as part of the application process.
- The issued ToR'S are considered restricted to monitoring the effects and not numerical and conceptual modelling as recommended by a range of studies including Planning Assessment Commissions and the IESC
- The issued ToR's are not considered to require a detailed analysis of the effects of mining operations on the quality of the surface and groundwater environment including the effects of these operations on the interconnectivity between these two environments.

Both Terms of Reference 1 and 2 are noted to contain a sub-item *"In delivering its report, the Panel will provide comment and make observations or recommendations about any information of factors the Panel believes relevant, or further work that should be undertaken"*. It has been assumed that this sub-item item provides a pathway for the investigation of the Panel into the concerns over the ToR's listed above. However, it is considered the wording may impede the level of scientific basis and comprehensiveness of the advice provided by the Panel to the DPE as well as stated detail of this advice referred to above. **The provision of a response containing a broad investigation approach by the Panel would be appreciated.**

Part C: Terms of Reference

This section of the submission provides comments on aspects of the three Terms of Reference and individual sub-items with consistent with the overall position of Council and the considered shortcomings provided in preceding sections of this submission. It also provides requested issues to be investigated as well as response by the Panel.

Terms of Reference 1

Undertake an initial review and report on specific coal mining activities at the Metropolitan and Dendrobium Coal Mines in the Greater Sydney Water Catchment Special Areas.

(Sub Item 1a): A review of the findings and recommendations of studies and reports deemed appropriate by the Panel.

The following studies and reports known to Council Staff, (in addition to those listed in the ToR'S), are recommended to be reviewed as part of the Investigation by the Panel:

- Report produced by the Planning Assessment Commission established to investigate the proposed Russell Vale Colliery Expansion Project (dated April 2016).
- The following documents/ advice provided by the Independent Expert Scientific Committee :
 - Project Advice on the Russell Vale Colliery Expansion (dated 11 March 2015).
 - Information Guidelines for Proponents preparing coal seam gas and large coal mining development proposals (IESC Guidelines).

In addition, the original Bulli Seam Project Application lodged in 2009 included mining precincts containing a number of upland swamps. BHP Billiton (South 32) were noted to state that these precincts had been removed from the Project Area following a review of the report produced a PAC established to investigate the Project Application to allow for more assessments and surveys. Staff are uncertain over the current short or long-term intent of South 32 in regard to this portion of the Project Area. However, the report produced by the PAC is considered an important reference document for review by the Panel as part of its investigation.

(Sub item 1b): A review of the types and reliability of prediction, monitoring and response methodologies currently used for assessing and managing the effects of mining activities as they relate to water quantity.

The provision of detailed comments regarding this ToR item is viewed as a matter for research organisations and Water NSW. The submission from this Government Agency on the website of the Office of Chief Scientist is viewed as providing sufficient comments to address the broad position of Council from a technical perspective.

However, the expressed concerns of the local community over impacts associated with mining to the condition of water sources (both water quantify and quality), as well as the adequacy of their assessment by mining companies, is shared by Council. Concerns over the long-term environmental adequacy of rehabilitation measures implemented to creeklines identified as being impacted by mining operations are also shared by Council. These concerns and recommended response by the Panel are detailed below.

Assessment of water quantity and quality issues

Council Staff are aware of a number of research studies into the depletion of water quantity from a range of water sources, (including groundwater), as a consequence of fracturing associated with mining operations. Council is also aware of a number of research studies identifying the return (or partial return), of this depleted water to watercourses downstream with resulting impact to both water quality and associated in-stream and riparian environment. Staff understand in relation to this matter that the Western Sydney University has carried research regarding this matter associated with the Bulli Seam Project,) in the Drinking Catchment).

It is consequently the preferred view of Council Staff that the Panel *review of the types and reliability of prediction, monitoring and response methodologies* currently used for assessing and managing the effects of mining activities as they relate to water quality, (in regard to both surface and groundwater), as well as water quantity.

Assessing and managing the impacts of mining to water sources

The provision of specific comments regarding Prediction, Monitoring and Response methodologies currently commonly utilised by mining companies is also viewed as a matter for specific research based Government Departments and organisations. However, the following provides comments based on the position of Council for each component of the approach as well as requested response by the Panel.

(a) Prediction of the effects of mining operations

The need for the prediction of likely effects to water sources is recognised as being important for mining companies, as well as Determining and Regulatory Authorities. However, issues have been observed by Staff in regard to the adequacy of this prediction, as well as its occurrence largely post Determination as part of the preparation of Subsidence Management Plans (SMP). The Panel is requested to note that Council's submissions have expressed the view that Subsidence Management Plans should be in the form of detailed Environmental Assessments.

In addition, Council has lodged detailed submissions on the NSW Integrated Mining Policy and the related DPE's Environmental Assessment Improvement Project for State Significant Development. These submissions have requested range of requested amendments to the draft Secretary Standard Assessment Requirements for mining applications consistent with the approach of IESC Guideline. They have also opposed the observed reliance of Determinations for the management of impacts by subsidiary plans post approval (such as SMP's). Copies of these submissions can be provided to the Panel upon request.

The IESC Guidelines is noted to state in relation to this matter that "*modelling and extensive baseline data is needed to allow for an accurate review of the adequacy of referred mining applications in predicting the likely level of subsidence related impacts to water sources*" (by the Committee). The Panel is requested to note that the statement in the submission from the OEH on these Guidelines that the predictions in mining applications are often deficient in scientific basis is supported by Council Staff.

Council, as a broad position, would consequently request that the Panel provide recommendations and advice to achieve an enhanced scientifically based prediction of likely subsidence levels and associated impacts to the quality and quantity of water sources at the application stage for mining projects in its response to the DPE.

(b) Monitoring the effects of mining operations

The undertaking of a detailed monitoring program by mining companies is recognised as being important independent of the scientific basis of the predicted levels of subsidence. The IESC Information Guidelines is noted to provide a range of items for a monitoring program including the presenting of collected information in referred projects. **Council Staff would be broadly satisfied with a monitoring program required by a mining Determination that is consistent with these Guidelines.**

(c) Responding to identified effects of mining operations

It has been assumed that 'response' within this ToR item refers to the Trigger approach noted to be commonly adopted by mining companies and regulatory authorities where a response is triggered if exceedances of predicted subsidence levels are identified by monitoring. This approach is viewed as being broadly satisfactory in regard to responding to subsidence impacts to structures.

However, Staff view this approach has shortcomings in the protection of water sources given its primary focus on responding to impacts subsequent to Determination rather than identifying measures for the avoidance and/or minimisation of such impacts at the application stage. The report produced by the PAC which investigated the Russell Vale expansion project is noted to state in relation to this matter "*The trigger criteria are a concern as the cumulative effects and impacts of subsidence in the area are not known with certainty, which presents a challenge to setting trigger levels for responding to future subsidence*". **The discussion over the views of the Panel over the 'trigger' approach would be appreciated at the meeting with Council Staff sought by this meeting.**

In summary, the need for Prediction, Monitoring and Response methodologies in certain circumstances is recognised as being appropriate. However, the Panel is requested to provide advice in its report to the DPE over the adequacy of this approach in protecting both the quantity and quality of water supply within the Drinking Catchment and recommendations to improve this approach.

(Sub Item 1c); Provide advice and recommendations on measures required to improve approaches to predicting, monitoring, responses and reporting including having regard to cumulative risks posed to the quantity of drinking water available in the Greater Sydney Water Catchment Special Areas

The requirement for the Panel to improve approaches to cumulative risks presented to the quantity of drinking water available from mining operations is welcomed in principle. The apparent inclusion of the Russell Vale Colliery expansion in this ToR sub item, given the reference to the Greater Sydney Water Catchment Special Area, is also welcomed. However, as stated above in regard to ToR 1a), Council Staff have concerns over the reliability and adequacy of the 'predict, monitor, and respond' approach in protecting water sources from the impacts of mining operations.

Council has requested a range of issues to be assessed in regard to the impacts of mining operations on water sources in a wide range of submissions on mining related applications and NSW Government Policies. Council's preferred view expressed in these submissions is that such impacts be accurately identified and be avoided or minimised at the application stage through:

- A comprehensive assessment of impacts to water quantity and water quality (including surface and groundwaters), utilizing conceptual and numerical modelling based on extensive baseline data. The approach detailed in the IESC Guidelines is viewed as a suitable basis for such an assessment.
- The establishment and enforcement of adequate mining exclusion zones adjacent to water courses. It is suggested the width of such zones be based on the Strahler Stream Classification System. (For example, a 10 metre exclusion zone for first order streams).

In relation to this matter, Council's submission on the review of the *Mine Subsidence Compensation Act 1961* requested that it be expanded to also apply to subsidence impacts to watercourses. The Panel is requested to note that Council resolved at its meeting on 15

February 2016 to “express its concern that compensation mechanisms for damage to the natural environment from mining impacts is not considered in the function of the Mine Subsidence Board and Council calls for this situation to be reviewed and remedied”. **The investigation of possible means of funding compensation measures consistent with the above resolution by the Panel is suggested.**

(Sub Item 1d): The Panel will provide advice to Government on how to respond to the findings and recommendations of reports reviewed including the Height of Fracturing Report

The Height of Fracturing Report is noted to recommend a range of studies to verify its broad finding regarding the apparent absence of an impediment to the upward migration of impacts associated with fracturing to effect the condition of surface and shallow groundwaters. This recommendation for additional studies has a high level of synergy with the position of Council and views of the local community and is supported in principle. The provision of technical advice to the DPE on the response to specific recommendations is acknowledged as not being a matter for Council. **However, the Panel is requested to note the preferred position of Council that the DPE implement all recommendations of this report, which it is noted to have taken ownership.**

Terms of Reference 2

Undertake a review of current coal mining in the Greater Sydney Water Catchment Special Areas with a particular focus on risks to the quantity of water available, the environmental consequences for swamps and the issue of cumulative impacts.

The requirement for the Panel to investigate the 'environmental consequences' (of current coal mining) to swamps and 'cumulative risks' presented to drinking water available is welcomed. The research based sub-items for this ToR item is however noted to be restricted to “A review and update of the findings of the 2008 Southern Coalfields Inquiry, including recommending measures to improve the way mining effects, impacts and consequences in relation to water quantity are assessed and managed”. There are concerns that the Term of Reference does not refer to the wide range of relevant research studies which have occurred subsequent to the Southern Coalfields Inquiry in 2008, including those by the IESC. **An assurance is sought from the Panel that all these studies will be reviewed as part of its investigation into this ToR.**

Environmental consequences of mining operations for swamps

The appointment of a person on the Panel with a recognised high level of expertise in the impacts of mining operations to the ecological and hydrological functions of upland swamps is strongly welcomed. Council is consequently satisfied that the investigation by the Panel and associated consultation with relevant expert stakeholders will produce strong recommendations to the DPE for responding to the environmental consequences of mining operations to upland swamps within the Drinking Catchment.

Council however has concerns over the adequacy of the response by the DPE to the Panel's Report based on observations of its response to relevant mining applications such as the Russell Vale Colliery Expansion Project. The report produced by the PAC established to investigate this Project was noted to state “the magnitude of potential water loss is also noted contested (by the Application). As a result of such uncertainty, the potential impacts on upland swamps are also uncertain as the swamps depends on the surface and shallow groundwater”. It is suggested in this regard, that there is scope for the Panel to provide comment on this matter as part of its response to Term of Reference 1 d) “the Panel is to provide advice to

Government on how to respond to the findings and recommendations of reviewed as part of ToR 1a)".

In relation to this matter, the Panel is requested to note that Council provided a submission on the Integrated Mining Policy in July 2015, which contained a *Policy Framework for Biodiversity Offsets for Upland Swamps and Associated Threatened Species Policy Framework (Swamp Policy Framework)*. The submission expressed opposition to the implementation of this Framework subject to the receipt of suitably qualified independent advice that the Policy will not result in adverse outcomes to the values and functions of any upland swamp. It is suggested that the establishment of the Panel provides a suitable opportunity for the undertaking of investigations to produce such expert advice. **It is consequently recommended that the Panel review the Swamp Policy Framework and provide advice over its adequacy and any identified improvements in its final report to the DPE.**

Managing cumulative impacts associated with mining operations

The assessment of cumulative impacts on water supplies within the Drinking Catchment is acknowledged as being highly important given the number of mining operations under different ownership. The absence of reference to cumulative water quality impacts in the ToR item is however noted with concern given the strong interrelationship between water quality and quantity identified by a range of research studies. The *"Cumulative Impacts of Activities which Impact Groundwaters and Surface waters within the Sydney Water Catchment Area"* Report produced by the NSW Office of the Chief Scientist and Engineer is noted to include the following recommendations of relevance to this matter:

- *That the Government develop a whole-of-Catchment environmental monitoring system.*
- *That the Government commission computational models which can be used to assess the impacts on quantity and quality of surface and groundwater.*

The above recommendations of the Chief Scientist in association with research studies known to Staff are viewed as highlighting the importance for the identification and management of the cumulative risks of mining operations to both water quantity and water quality. **The Panel is consequently requested to provide advice and recommendations for the avoidance and minimisation of these risks in its final report to the DPE.**

Term of Reference 3

Provide advice as required to the Department of Planning and Environment on mining activities in the Greater Sydney Water Catchment Special Areas which may include but is not confined to:

- *A Subsidence Management Plan application for Longwall 16 at the Dendrobium Mine*
- *An Extraction Plan application for Longwall 33 at the Metropolitan Mine*
- *An Environmental Impact Statement for the Dendrobium Extension Project*
- *A Preferred Project Report for the Russell Vale Underground Expansion Project.*

The inclusion of a Term of Reference Item that refers to current mining related applications within the Drinking Catchment Area is recognised as being appropriate in providing a level of certainty to the respective proponents. However, the above, (as well as any other), applications, is viewed as having strong relevance to the outcomes of the investigation by the Panel and its final Report.

The Panel is requested to note in relation to this matter that Council resolved at its meeting on 18th June 2018 in endorsing this submission to request the DPE *"not issue a Determination*

for any mining related application until such time it has received and reviewed the final Report by the Independent Expert Panel". It is consequently the preferred position of Council Staff that specific detailed advice regarding the above projects by the Panel be contained in its final report to the DPE.

Terms of Reference 1e) and 2b): Consultation and site visits by the Panel

In developing its advice, the Panel will meet, undertake site visits, seek information on data, and consult as needed.

The impacts of mining operations on water sources within the Drinking Catchment, as well as in a more broader context, is of strong interest to Council (Staff and elected Councillors) and the local community. The visit of members of the Panel to the Wollondilly LGA and Council would therefore be greatly appreciated if time permits. The involvement of Councillors in such a meeting would be preferable which may involve a presentation at an evening Workshop. A joint meeting with Staff from Wollondilly and Wollongong Councils could potentially be arranged if this would be of more convenience to the Panel.

The Tahmoor Colliery, (which has recently been sold to SIMEC), is acknowledged as being outside the Drinking Catchment Area. However, Staff are aware of a research paper by Western Sydney University in regard to a creekline recently traversed by a mining longwall associated with this Project that is nearing finalisation. The author of this Study has advised Staff of his willingness to discuss aspects of this Study following its publication in approximately mid-2018. It is suggested in this regard a site visit to this creekline by the Panel would be of benefit to its investigation.

PART D: CONCLUDING STATEMENT

This submission welcomes the establishment of the Independent Expert Panel as a means of obtaining enhanced scientific certainty over the impacts of mining operations on water sources within the Drinking Catchment and responding to community concerns regarding this matter. The submission however provides in-principle support to the investigation as a result of concerns over aspects of the issued Terms of Reference for the Panel as well as uncertainty over the adequacy of the response by the NSW Department of Planning and Environment.

The submission also outlines issues requested to be reviewed and investigated consistent with the previous adopted position of Council and local community over the impacts of mining on water sources in general (both quantity of water and as well as water quality). The submission also seeks a meeting (and possibly a site visit if time permits), to the Wollondilly LGA to discuss issues raised.

ATTACHMENT 3

SUPPLEMENTARY SUBMISSION ON THE TERMS OF REFERENCE FOR THE INDEPENDENT PANEL FOR MINING IN THE DRINKING CATCHMENT

Thank you for the opportunity provided for representatives of Council to meet with members of the Independent Expert Panel for Mining in the Drinking Catchment (Panel) on 12th February 2019.

An invitation was provided at this meeting for Council to lodge a supplementary submission to its original submission on the Terms of Reference for the investigation by the Panel dated 28th June 2018. The following provides comments over two issues that the Panel sought additional information and recommended response by the Panel and the NSW Office of Chief Scientist and Engineer (Chief Scientist).

(i) *Assessment of water quality and quantity issues associated with mining in the Drinking Catchment*

Council's original submission expressed the view that the issued Terms of Reference did not require a detailed analysis of the effects of mining operations on the quality of surface and groundwaters sources including the connectivity of these sources. It recommended in relation to this matter that the *"Panel review the types and reliability of prediction, monitoring and response methodologies related to both the quality and quantity of surface and groundwaters associated with mining operations"*.

The comments made by members of the Panel that the investigation of specific water quality impacts was not possible within the stipulated timeframes for the provision of its Report on Stage 2 to the NSW Department of Planning and Environment is acknowledged. However, the concerns of Council Staff that water quality was not being specifically investigated by the Plan is requested to be noted by the Office of Chief Scientist given the considered close interrelationship between the quality and quantity of drinking water. The view expressed by Dr Galvin that this matter was likely be raised as an 'emerging issue' for further investigation in its Report is supported in principle. **It is requested that the Office of Chief Scientist note this support and carry out targeted consultation with stakeholder groups at the commencement of this 'further investigation' that includes Wollondilly Shire Council.**

(ii) *Experience of Council with Trigger Action Response Plans*

Members of the Panel at the meeting were noted to seek additional information from Council over its experience with Trigger Action Response Plans and their adequacy in protecting and responding to impacts from mining on the condition of local waterways. Council's original submission recognised the need for such Plans but expressed shortcomings in this approach given its focus is to respond to impacts to waterways subsequent to Determination.

Council Staff present at the meeting referred to a recent study by Dr Ian Wright from the Western Sydney University which examined the potential impacts of mining on Redbank Creek as an example of experienced shortcomings in this approach. The research paper on this study is attached from the receipt of approval for its forwarding to members of the Panel.

It is requested to be noted that a submission on the Tahmoor South Project Application providing detailed comments on these impacts based on received specialist advice is due to be considered by Council at its meeting on 18th March 2019. A summary of the experiences and basic position of Staff in relation to the adequacy of the Prediction/Monitoring Approach in relation to this waterway as well as mining operations in listed below incorporates aspects of this submission and associated received specialist advice:

- Actual subsidence levels have been noticed to have exceeded the predicted levels at the assessment stage at a relatively common occurrence
- The significant impacts to the ecological health of a waterway as a result of mining directly beneath waterways is considered highlighted by the outcomes of the research study by Dr Ian Wright in relation to Redbank Creek. The identified impact is viewed as being of such a significant level that the ability of the noted required Creek Restoration Plan by the NSW Division of Resources and Geoscience to achieve a full restoration of the creek to its ecological condition prior to mining is strongly questioned.
- There needs to be a detailed hydrogeological investigation to identify the greatest possible extent possible impacts associated with mine induced fracturing on interaction of mining induced fracturing and surface and groundwater sources at the application stage rather than being the primary responsibility of Extraction Plans.
- Trigger Response Plans should be based on a strong scientific investigation and analysis of extensive baseline data which, (preferably), occurs at the application stage.

It is recommended that each of the above views of Council be considered by the Panel both as part of Terms of Reference 2 as well as any future investigations in relation to 'emerging issues'.

It would be appreciated if this supplementary submission could be recorded as a formal submission and be made publicly available on the website of the NSW Office of Chief Scientist and Engineer.